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MOTOROLA, INC  
INTELLECTUAL PROPERTY SECTION  
LAW DEPT  
8000 WEST SUNRISE BLVD  
FT LAUDERDAL, FL 33322

EXAMINER

FOX, BRYAN J

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/649,999

Applicant(s)

DORENBOSCH ET AL.

Examiner

Bryan J. Fox

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 and 25-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 and 25-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 9-11, 14, 16, 17, 22 and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Han (US006714785B1).

Regarding **claim 1**, Han discloses that a mobile continuously measures pilot signal power from the adjacent base station and sends a handoff request to the service base station when the measured value is higher than a threshold (see column 8, lines 25-39), which reads on the claimed, “determining that a wireless device operating in a first wireless communication system is detecting a triggering event.” Upon detection of the handoff request, the service base station examines traffic resources of the adjacent base station through a base station controller to determine whether there are sufficient spare channels and proceeds to perform a handoff if there are spare channels (see column 8, line 66 – column 9, line 7), which reads on the claimed, “initiating a registration sequence with a second wireless communication system in response to determining that the wireless device is detecting the triggering event.” The mobile station reports the location flag, direction flag and displacement to the base station so

as to perform a handoff taking into consideration the traveling direction of the mobile station. When it is determined that the base station is not moving towards the adjacent base station, the handoff is cancelled (see column 8, line 25 – column 9, line 34), which reads on the claimed, “conducting a current call or a subsequent call via the second wireless communication system in response to determining that a speed or displacement of the wireless device exceeds a first predetermined threshold; and aborting the registration sequence in response to determining that a speed or displacement of the wireless device does not exceed a second predetermined threshold,” wherein the direction of motion reads on the thresholds.

Regarding **claim 9**, Han discloses that the mobile station determines the direction flag and displacement (see column 4, lines 18-39), sends a handoff request to a base station (see column 8, lines 43-57) and sends a handoff cancel message to the base station (see column 10, lines 8-31), which reads on the claimed, “the determining, initiating, conducting and aborting steps are performed in the wireless device, wherein the wireless device is a mobile subscriber unit.”

Regarding **claim 10**, Han discloses that when it is determined that the base station is not moving towards the adjacent base station, the handoff is cancelled (see column 8, line 25 – column 9, line 34 and figure 8), which reads on the claimed, “aborting the registration sequence comprises, if the registration is complete, deregistering from the second wireless communication system in response to determining that a speed or displacement of the wireless device does not exceed the second predetermined threshold.”

Regarding **claim 11**, Han discloses that the mobile station reports the location flag, direction flag and displacement (see column 8, lines 25-39), which reads on the claimed, "the speed or displacement of the wireless device step is determined by movement detecting means of the wireless device."

Regarding **claim 14**, Han discloses that a mobile continuously measures pilot signal power from the adjacent base station and sends a handoff request to the service base station when the measured value is higher than a threshold (see column 8, lines 25-39), which reads on the claimed, "determining that a wireless device operating in a first wireless communication system is detecting a triggering event." The mobile station reports the location flag, direction flag and displacement to the base station so as to perform a handoff taking into consideration the traveling direction of the mobile station (see column 8, line 25 – column 9, line 34). Upon detection of the handoff request, the service base station examines traffic resources of the adjacent base station through a base station controller to determine whether there are sufficient spare channels and proceeds to perform a handoff if there are spare channels and when it is determined that the base station is not moving towards the adjacent base station, the handoff is cancelled (see column 8, line 25 – column 9, line 34), which reads on the claimed, "initiating a registration sequence with a second wireless communication system in response to determining that the wireless device is detecting a triggering event and measuring a speed or displacement to the wireless device exceeding a first predetermined threshold." When there exists an available channel, handover is performed (see column 8, line 25 – column 9, line 34), which reads on the claimed,

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“conducting current and subsequent calls via the second wireless communication system.”

Regarding **claim 16**, Han discloses that when it is determined that the base station is not moving towards the adjacent base station, the handoff is cancelled (see column 8, line 25 – column 9, line 34), which reads on the claimed, “aborting the registration sequence in response to determining that a speed or displacement of the wireless device does not exceed a second predetermined threshold.” The mobile station determines the direction flag and displacement (see column 4, lines 18-39), sends a handoff request to a base station (see column 8, lines 43-57) and sends a handoff cancel message to the base station (see column 10, lines 8-31), which reads on the claimed, “the determining, initiating, conducting and aborting steps are performed in the wireless device, wherein the wireless device is a mobile subscriber unit.”

Regarding **claim 17**, Han discloses that when it is determined that the base station is not moving towards the adjacent base station, the handoff is cancelled (see column 8, line 25 – column 9, line 34 and figure 8), which reads on the claimed, “if the registration sequence is completed, deregistering from the second wireless communication system in response to determining that a speed or displacement of the wireless device does not exceed a second predetermined threshold.”

Regarding **claim 22**, Han discloses that a mobile continuously measures pilot signal power from the adjacent base station and sends a handoff request to the service base station when the measured value is higher than a threshold (see column 8, lines 25-39), which reads on the claimed, “determining that a wireless device operating in a

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first wireless communication system is detecting a triggering event.” Upon detection of the handoff request, the service base station examines traffic resources of the adjacent base station through a base station controller to determine whether there are sufficient spare channels and proceeds to perform a handoff if there are spare channels (see column 8, line 66 – column 9, line 7), which reads on the claimed, “initiating a registration sequence with a second wireless communication system in response to determining that the wireless device is detecting the triggering event.” The mobile station reports the location flag, direction flag and displacement to the base station so as to perform a handoff taking into consideration the traveling direction of the mobile station. When it is determined that the base station is not moving towards the adjacent base station, the handoff is cancelled (see column 8, line 25 – column 9, line 34), which reads on the claimed, “determining at least one of a speed and a displacement of the wireless device; and conducting at least one of a current call and a subsequent call via the second wireless communication system in response to determining that at least one of the speed and displacement of the wireless device exceeds a first predetermined threshold; and aborting the registration sequence in response to determining that a speed or displacement of the wireless device does not exceed a second predetermined threshold.”

Regarding **claim 28**, Han discloses that a mobile continuously measures pilot signal power from the adjacent base station and sends a handoff request to the service base station when the measured value is higher than a threshold (see column 8, lines 25-39), which reads on the claimed, “detecting a triggering event at the wireless device.”

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The mobile station reports the location flag, direction flag and displacement to the base station so as to perform a handoff taking into consideration the traveling direction of the mobile station (see column 8, line 25 – column 9, line 34), which reads on the claimed, “measuring a speed or a displacement of the wireless device.” Upon detection of the handoff request, the service base station examines traffic resources of the adjacent base station through a base station controller to determine whether there are sufficient spare channels and proceeds to perform a handoff if there are spare channels and when it is determined that the base station is not moving towards the adjacent base station, the handoff is cancelled (see column 8, line 25 – column 9, line 34), which reads on the claimed, “initiating... a registration sequence with a second wireless communication system in response to detecting a triggering event at the wireless device.” When there exists an available channel, handover is performed (see column 8, line 25 – column 9, line 34), which reads on the claimed, “conducting the current or a subsequent call via the second wireless communication system in response to determining that the speed or the displacement of the wireless device exceeds a first predetermined threshold; and conducting the current call or a subsequent call via the first wireless communication system in response to determining that the speed or the displacement of the wireless device does not exceed the first predetermined threshold.” Han discloses that the mobile continuously measures pilot signal power from the adjacent base station and sends a handoff request to the service base station when the measured value is higher than a threshold (see column 8, lines 25-39), which reads on the claimed, “conducting a current call via a first wireless communication system,” and



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the initiation while conduction the current call via the first wireless communication system.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 2-8, 12, 15, 21, 23, 25-27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Han in view of Hammond et al (US 20040203789A1).

Regarding **claim 2**, Han fails to expressly disclose the triggering event is at least one of a detection of a wireless local area network border cell and a detection of a degradation of signal quality.

In a similar field of endeavor, Hammond et al disclose a mobile client moves from a data connection to a WLAN and the WLAN signal is lost due to range, so the mobile client makes an attachment to the more costly GPRS system (see paragraph 47), which

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reads on the claimed, "the triggering event is a detection of a wireless local area network border cell or a detection of a degradation of signal quality."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Han with Hammond et al to include the above handover when the a first system is out of range in order to eliminate the need for a user to manually change systems and provide a better method and system allowing use of a device in both networks (see paragraphs 13-14).

Regarding **claim 3**, Han fails to disclose that the first wireless communication system is a wireless local area network and the second wireless communication system is a wide area network.

In a similar field of endeavor, Hammond et al disclose transitioning from a WLAN to a WAN (see paragraph 34), which reads on the claimed, "the first wireless communication system is a wireless local area network and the second wireless communication system is a wide area network."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Han with Hammond et al to include the above transition from a WLAN to a WAN in order to eliminate the need for a user to manually change systems and provide a better method and system allowing use of a device in both networks (see paragraphs 13-14).

Regarding **claim 4**, Han fails to disclose that a WLAN uses at least one protocol of IEEE standard 802.11 and Bluetooth ®.

In a similar field of endeavor, Hammond et al disclose a WLAN conforming to the 802.11 standard (see paragraph 25), which reads on the claimed, "the wireless local area network uses a protocol of IEEE standard 802.11 or Bluetooth ®."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Han with Hammond et al to include the above WLAN conforming to the 802.11 standard in order to take advantage of the readily available and widely used standard.

Regarding **claim 5**, Han discloses the use of CDMA, however, Han fails to expressly disclose a WAN using one of CDMA, TDMA, GSM and iDEN.

In a similar field of endeavor, Hammond et al disclose a WAN using GSM/GPRS (see paragraph 6).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Han with Hammond et al to include the above WAN using GSM in order to take advantage of the benefits of the GSM/GPRS network, such as long range and ubiquitous coverage as suggested by Hammond et al (see paragraph 6).

Regarding **claim 6**, Han fails to disclose that the first wireless communication system is a wide area network and the second wireless communication system is a wireless local area network.

In a similar field of endeavor, Hammond et al disclose transitioning from a WAN to a WLAN (see paragraph 33), which reads on the claimed, "the first wireless communication system is a wide area network and the second wireless communication system is a wireless local area network."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Han with Hammond et al to include the above transition from a WLAN to a WAN in order to eliminate the need for a user to manually change systems and provide a better method and system allowing use of a device in both networks (see paragraphs 13-14).

Regarding **claim 7**, Han fails to disclose that a WLAN uses at least one protocol of IEEE standard 802.11 and Bluetooth ®.

In a similar field of endeavor, Hammond et al disclose a WLAN conforming to the 802.11 standard (see paragraph 25), which reads on the claimed, “the wireless local area network uses a protocol of IEEE standard 802.11 or Bluetooth ®.”

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Han with Hammond et al to include the above WLAN conforming to the 802.11 standard in order to take advantage of the readily available and widely used standard.

Regarding **claim 8**, Han discloses the use of CDMA, however, Han fails to expressly disclose a WAN using one of CDMA, TDMA, GSM and iDEN.

In a similar field of endeavor, Hammond et al disclose a WAN using GSM/GPRS (see paragraph 6).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Han with Hammond et al to include the above WAN using GSM in order to take advantage of the benefits of the GSM/GPRS network, such as long range and ubiquitous coverage as suggested by Hammond et al (see paragraph 6).

Regarding **claim 12**, Han fails to expressly disclose the use of an accelerometer detecting means or a global positioning system means.

In a similar field of endeavor, Hammond et al disclose the use of GPS (see paragraph 25).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Han with Hammond et al to include the above use of GPS in order to take advantage of the free use of the system as suggested by Hammond et al (see paragraph 28).

Regarding **claim 15**, Han fails to expressly disclose the triggering event is at least one of a detection of a wireless local area network border cell and a detection of a degradation of signal quality.

In a similar field of endeavor, Hammond et al disclose a mobile client moves from a data connection to a WLAN and the WLAN signal is lost due to range, so the mobile client makes an attachment to the more costly GPRS system (see paragraph 47), which reads on the claimed, "the triggering event is a detection of a wireless local area network border cell or a detection of a degradation of signal quality."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Han with Hammond et al to include the above handover when the a first system is out of range in order to eliminate the need for a user to manually change systems and provide a better method and system allowing use of a device in both networks (see paragraphs 13-14).

Regarding **claim 21**, Han discloses that a mobile continuously measures pilot signal power from the adjacent base station and sends a handoff request to the service base station when the measured value is higher than a threshold (see column 8, lines 25-39). The mobile station reports the location flag, direction flag and displacement to the base station so as to perform a handoff taking into consideration the traveling direction of the mobile station (see column 8, line 25 – column 9, line 34), which reads on the claimed invention where at least one mobile subscriber determines when to handover in response to determining that at least one of the speed and displacement of the device exceed a predetermined threshold. When it is determined that the base station is not moving towards the adjacent base station, the handoff is cancelled (see column 8, line 25 – column 9, line 34), which reads on the claimed, “the handover manager aborts a registration sequence with the second wireless communication system in response to determining that a speed or displacement of the wireless device does not exceed a second predetermined threshold.” Han fails to disclose a wireless local area network, a second communications system or a border cell.

In a similar field of endeavor, Hammond et al disclose a mobile client with both a GPRS transceiver and a WLAN transceiver (see paragraph 39 and figure 8). A mobile client moves from a data connection to a WLAN and the WLAN signal is lost due to range, so the mobile client makes an attachment to the more costly GPRS system (see paragraph 47), which reads on the claimed, “at least one cell of a wireless local area network communication system, the at least one cell providing communication coverage within a structure having at least one egress point; at least one coverage cell of a

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second communication system, overlapping the at least one cell of a wireless local area network, for providing communication coverage outside the structure; at least one border cell of a wireless local area network communications system, the border cell located at the egress point of the structure, providing a transition area from the wireless local area network communication system and the second communications system,” and determining when to handover in response to determining that the device is in communication with a wireless local area network border cell.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Han with Hammond et al to include the above two different communication systems and transition between in order to extend the coverage area.

Regarding **claim 23**, Han fails to expressly disclose the triggering event is at least one of a detection of a wireless local area network border cell and a detection of a degradation of signal quality.

In a similar field of endeavor, Hammond et al disclose a mobile client moves from a data connection to a WLAN and the WLAN signal is lost due to range, so the mobile client makes an attachment to the more costly GPRS system (see paragraph 47), which reads on the claimed, “the triggering event is a detection of a wireless local area network border cell or a detection of a degradation of signal quality.”

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Han with Hammond et al to include the above handover when the a first system is out of range in order to eliminate the need for a user to manually

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change systems and provide a better method and system allowing use of a device in both networks (see paragraphs 13-14).

Regarding **claim 25**, the combination of Han and Hammond et al discloses that when it is determined that the base station is not moving towards the adjacent base station, the handoff is cancelled (see Han column 8, line 25 – column 9, line 34 and figure 8), which reads on the claimed, “aborting the registration sequence comprises, if the registration sequence is complete, deregistering from the second wireless communication system in response to determining that a speed or displacement of the wireless device does not exceed the second predetermined threshold.”

Regarding **claim 26**, the combination of Han and Hammond et al discloses that the mobile station reports the location flag, direction flag and displacement (see column 8, lines 25-39), which reads on the claimed, “the speed or displacement of the wireless device is determined by movement detecting means of the wireless device.”

Regarding **claim 27**, Han fails to expressly disclose the use of an accelerometer detecting means or a global positioning system means.

In a similar field of endeavor, Hammond et al disclose the use of GPS (see paragraph 25).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Han with Hammond et al to include the above use of GPS in order to take advantage of the free use of the system as suggested by Hammond et al (see paragraph 28).



Regarding **claim 29**, the combination of Han and Hammond et al discloses when it is determined that the base station is not moving towards the adjacent base station, the handoff is cancelled (see Han column 8, line 25 – column 9, line 34), which reads on the claimed, “determining again a speed or a displacement of the wireless device; and deregistering from the second wireless communication system in response to determining that the again determined speed or displacement of the wireless device does not exceed a second predetermined threshold.”

Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Han in view of Hammond et al and further in view of the applicants' admission of prior art.

Regarding **claim 18**, Han discloses that a mobile continuously measures pilot signal power from the adjacent base station and sends a handoff request to the service base station when the measured value is higher than a threshold (see column 8, lines 25-39). The mobile station reports the location flag, direction flag and displacement to the base station so as to perform a handoff taking into consideration the traveling direction of the mobile station (see column 8, line 25 – column 9, line 34), which reads on the claimed, “means for measuring speed and displacement of the wireless device, communicatively coupled to the controller,” and, handover manager for determining when to handover in response to speed and displacement of the device exceed a first predetermined threshold. When it is determined that the base station is not moving towards the adjacent base station, the handoff is cancelled (see column 8, line 25 –

column 9, line 34), which reads on the claimed, "the handover manager aborts a registration sequence with the second wireless communication system in response to determining that a speed or displacement of the wireless device does not exceed a second predetermined threshold." Han fails to disclose two transceivers designed to operate on a separate wireless communications system and a determining that the wireless device is in communication with a wireless local area network border cell.

In a similar field of endeavor, Hammond et al disclose a mobile client with both a GPRS transceiver and a WLAN transceiver (see paragraph 39 and figure 8), which reads on the claimed, "at least two transceivers, each transceiver designed to operate on a separate wireless communications system, for transmitting and receiving wireless information." A mobile client moves from a data connection to a WLAN and the WLAN signal is lost due to range, so the mobile client makes an attachment to the more costly GPRS system (see paragraph 47), which reads on the claimed, "determining that the wireless device is in communication with a wireless local area network border cell."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Han with Hammond et al to include the above two different system transceivers and handover when the a first system is out of range in order to eliminate the need for a user to manually change systems and provide a better method and system allowing use of a device in both networks (see paragraphs 13-14) and extend the coverage area. The combination of Han and Hammond et al fails to expressly disclose the use of system stacks.

The applicant admits as prior art the use of wireless system stacks (see page 3, lines 1-15).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Han and Hammond et al to include the above wireless system stacks in order to allow optimal operation on each of the systems.

Regarding **claim 19**, as applied to claim 18 above, Han fails to expressly disclose the use of an accelerometer detecting means and a global positioning system means.

In a similar field of endeavor, Hammond et al disclose the use of GPS (see paragraph 25).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Han with Hammond et al to include the above use of GPS in order to take advantage of the free use of the system as suggested by Hammond et al (see paragraph 28).

Regarding **claim 20**, the combination of Han and Hammond et al discloses when it is determined that the base station is not moving towards the adjacent base station, the handoff is cancelled (see Han column 8, line 25 – column 9, line 34), which reads on the claimed, “the handover manager, if a registration sequence with the second wireless communication system is completed, deregisters the wireless device from the second wireless communication system in response to determining that a speed or displacement of the wireless device does not exceed the second predetermined threshold.”

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Han in view of Hammond et al as applied to claims 12 and 19 above, and further in view of Mantyjarvi et al (US 20030109258A1).

Regarding **claim 13**, the combination of Han and Hammond et al fails to disclose the use of an accelerometer detecting means comprising at least three independent axes.

In a similar field of endeavor, Mantyjarvi et al disclose a terminal with an accelerometer block that comprises one or more accelerometers measuring acceleration in at least three orthogonal directions (see paragraph 37), which reads on the claimed, "accelerometer detecting means comprising at least three independent axes."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Han and Hammond et al with Mantyjarvi et al to include the above use of an accelerometer in order to determine movement of the device as suggested by Mantyjarvi et al (see paragraph 6) without the need for GPS equipment and signals.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Han in view of Cheng et al (US006771963B1) and further in view of Hammond.

Regarding **claim 30**, Han fails to disclose the triggering even is a detection of a wireless local area network border cell, the border cell providing information to the wireless device that identifies the cell as a border cell.

In a similar field of endeavor, Cheng discloses a base station that can operate as part of a CDMA system with a first allocation of frequency channels, and can handdown from a CDMA system to an AMPS system, or to a different CDMA system and the system may partly overlap another system (see column 4, lines 38-56). Base station 10 is equipped to handdown to the other system such that the mobile station continues to be served by base station 10, but according to the protocols of the second communication system (see column 5, lines 14-35), which reads on the claimed triggering event that is detection of a border cell; the border cell providing information to the wireless device that identifies the cell as a border cell.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Han with Cheng et al to include the above border cell handover function in order to allow a handover between systems operating with different protocols and thereby extending the operating range of the mobile device. The combination of Han and Cheng et al fails to disclose the use of wireless local area network.

In a similar field of endeavor, Hammond et al disclose the use of WLAN (see paragraph 47).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Han and Cheng et al with Hammond to

include the above use of WLAN in order to take advantage of the benefits of WLAN such as portable network access.

### ***Response to Arguments***

Applicant's arguments filed November 7, 2005 have been fully considered but they are not persuasive.

The applicant argues that Han does not disclose a procedure for transferring between a first communications system and a different second communications system. The Examiner respectfully disagrees. The different base stations disclosed by Han read on the broadest reasonable interpretation in light of the specification of different communications systems.

The applicant argues that Han fails to disclose initiating a registration sequence with a first or second wireless system or aborting the registration with a first or second system, particularly based on speed or displacement of the wireless device. The Examiner respectfully disagrees. The handoff disclosed by Han reads on the broadest reasonable interpretation in light of the specification of registration.

Applicant's arguments with respect to claims 9, 16 and 20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan J. Fox whose telephone number is (571) 272-7908. The examiner can normally be reached on Monday through Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bryan Fox  
February 3, 2006



CHARLES APPIAH  
PRIMARY EXAMINER